

LOUISVILLE METRO HEALTH STATUS REPORT 2010

Produced by:

Office of Policy Planning and Evaluation, LMPHW

Overview

One of the core functions of public health is to assess the health needs of the community. The seventh annual health status report is part of our assessment of the Louisville Metro community and includes indicators and highlights health disparities in the following areas:

- Demographic and Social Profile
- Maternal and Child Health
- Causes of Death
- Chronic Diseases
- Behavioral Risk Factors
- Oral Health
- Mental Health
- Injury
- Childhood Lead Exposure
- Communicable Diseases

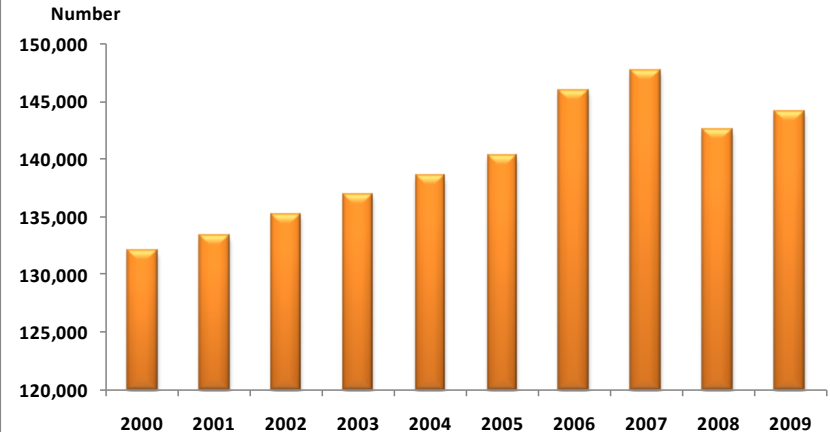
What is New?

- ◆ Behavior Risk Factor Surveillance Survey (BRFSS)
- ◆ Environmental Services
- ◆ Air Pollution Control
- ◆ Louisville Water Company Services
- ◆ Youth Risk Behaviors
- ◆ Hospital Discharge Data
- ◆ H1N1 (Novel A Influenza)

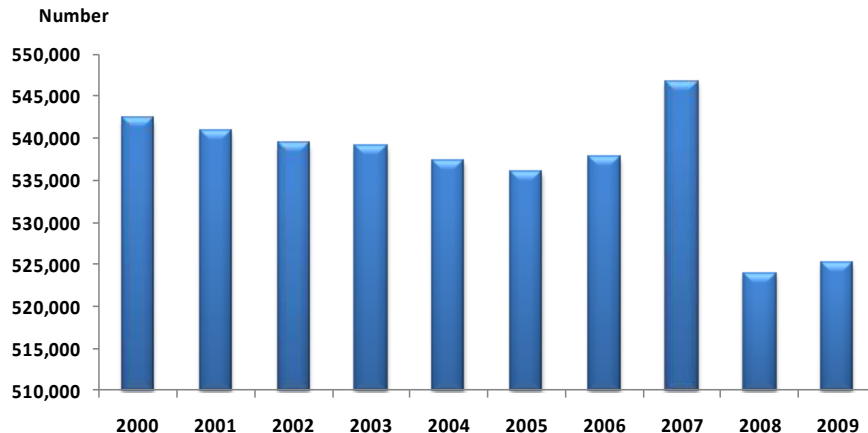
Population by Race, 2000-2009

➤ An increasing trend among all populations was observed when compared to year 2008. The White and African-American population decreased in 2008 after steady growth in previous years, while the Hispanic population has increased all through.

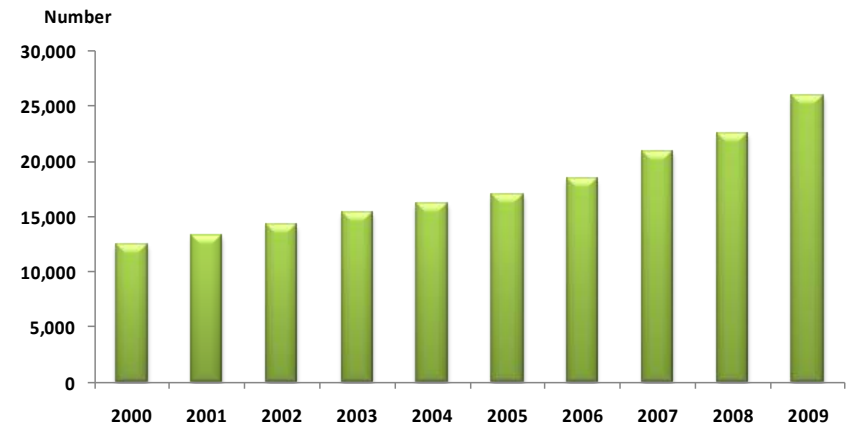
**Population Estimates of Louisville Metro
Non-Hispanic African Americans, 2000-2009**



**Population Estimates of Louisville Metro Non-Hispanic
Whites 2000-2009**

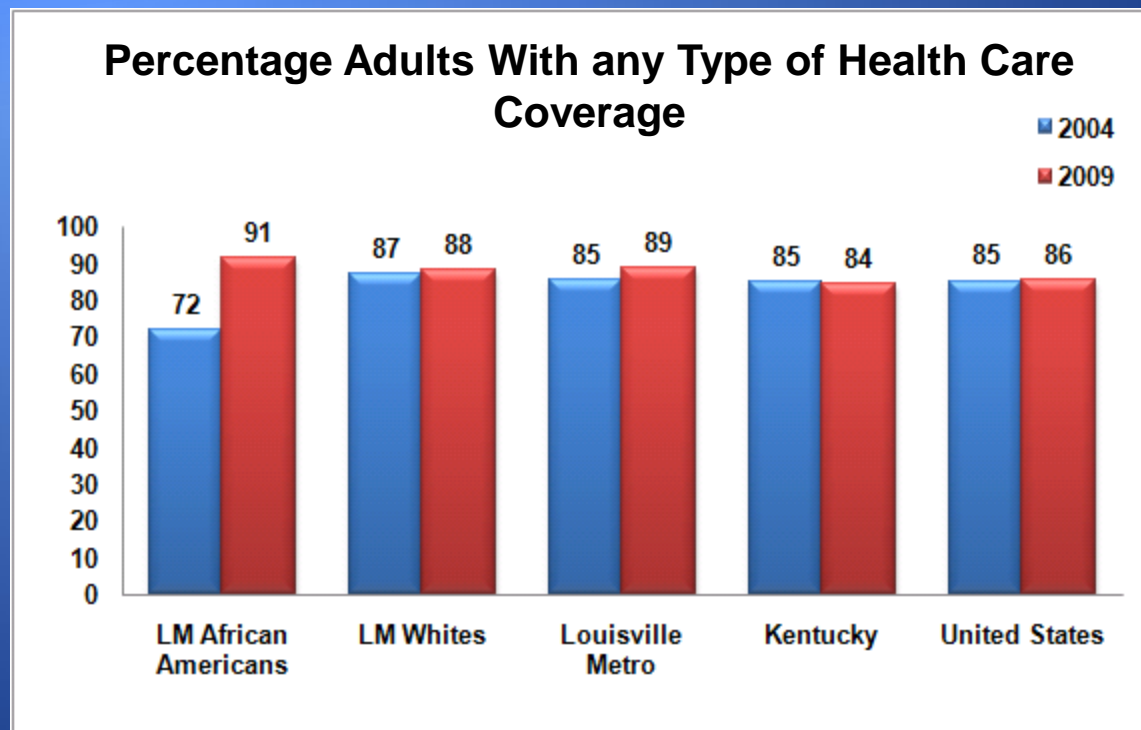


Population Estimates 2000-2009 Louisville Metro Hispanics



Health Care Coverage

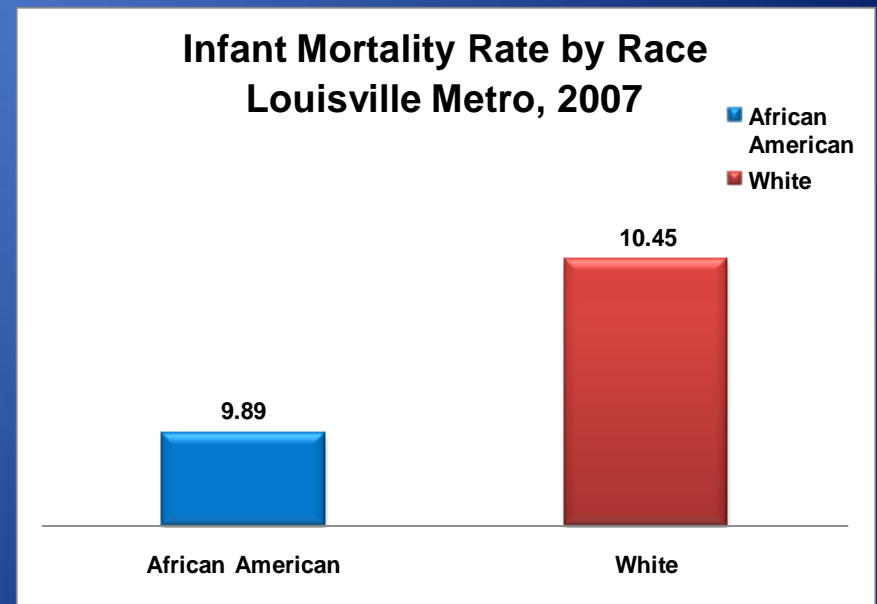
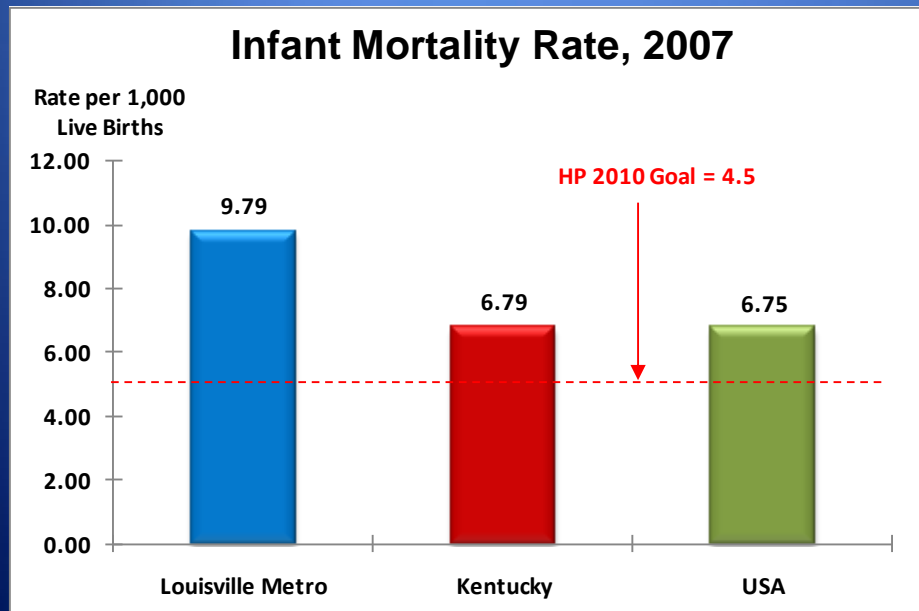
- 89% of Louisville Metro BRFSS Survey responders have health care coverage
- Health care coverage in African Americans increased



Source: Behavioral Risk Factor Surveillance Survey (BRFSS) 2004, 2009
Kentucky Cabinet for Health and Family Services (CHFS)

Infant Mortality, 2007

- There were 10,628 live births. This was a slight increase from the previous year.
- Asian and Pacific Islander women (30.3), and African American women (20.9) had the highest birth rate compared to White women (13).
- The infant mortality rate among African Americans was almost equal to the rate for Whites. (9.9 per 1,000 live births compared to 10.5)

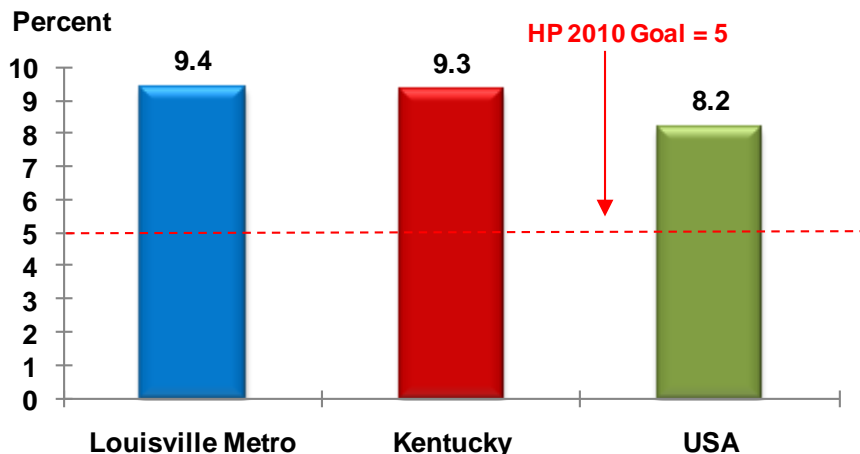


Source: 2007 Louisville Metro Preliminary Birth Records

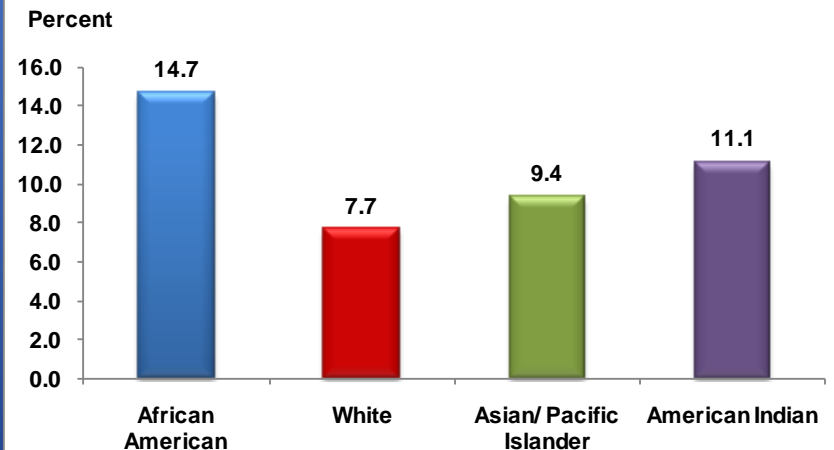
Low Birth Weight (LBW), 2007

- Children born with LBW are more likely to die within the first year of life and experience more health problems.
- In the year 2007, 9.4% of the births were classified as LBW.
- African American and American Indians had highest percentage of LBW.
- 33% of African American women did not receive prenatal care in the first trimester.

Percent Low Birth Weight, 2007



**Percent Low Birth Rate by Race
Louisville Metro 2007**

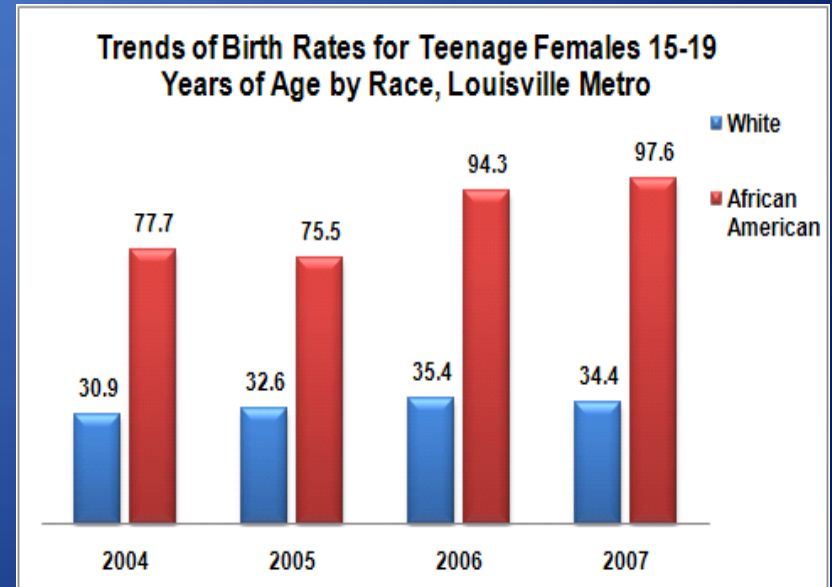
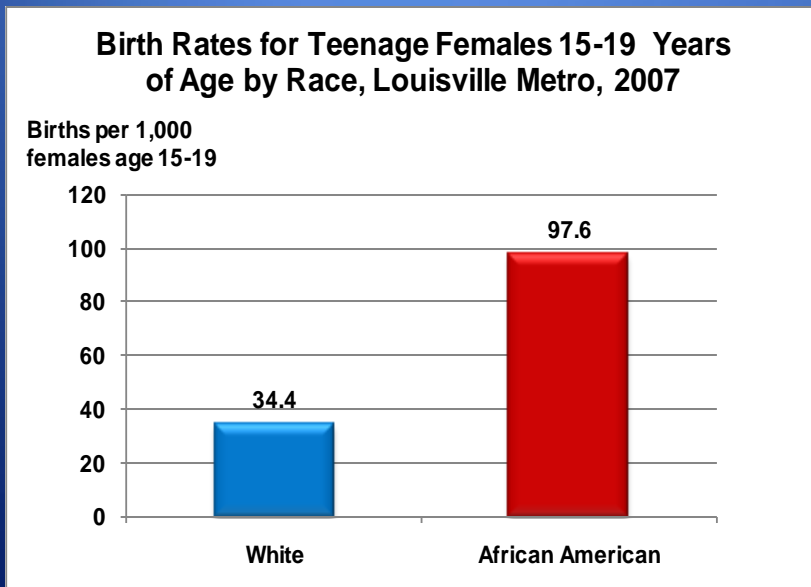
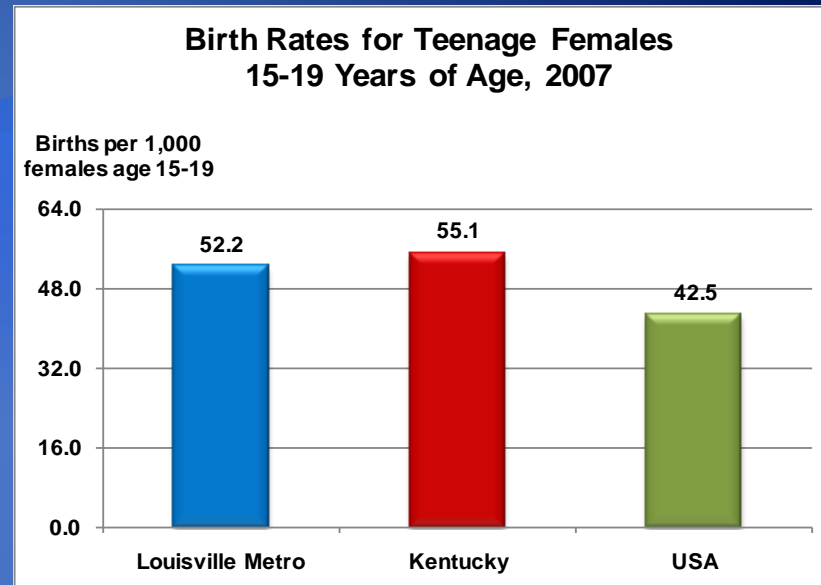


Source: 2007 Louisville Metro Preliminary Birth Records

Birth to Teens, 2007

➤ African American females 15-19 years of age had a teen birth rate approximately three times higher than that of White females (97.6 per 1,000 births compared to 34.4).

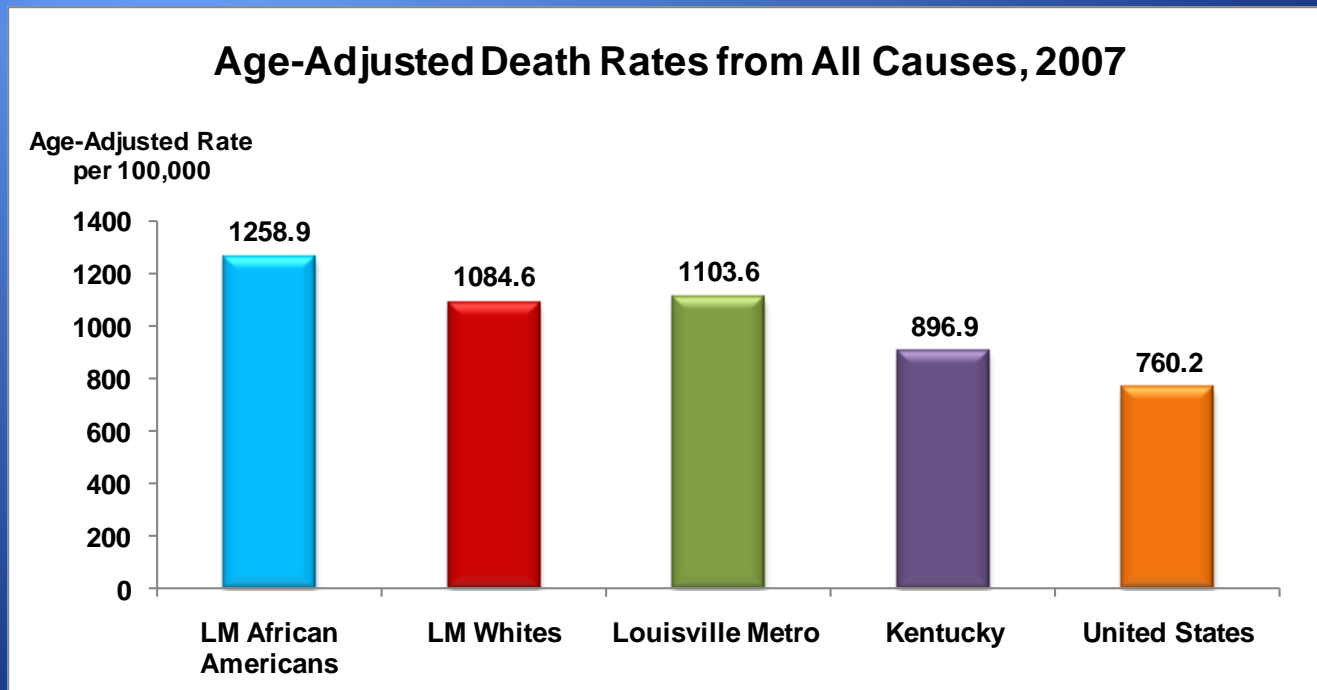
➤ Babies of teenage mothers are more likely to die the first year of life compared to babies born to mothers in their twenties and thirties.



Source: 2007 Louisville Metro Preliminary Birth Records

Causes of Death, 2007

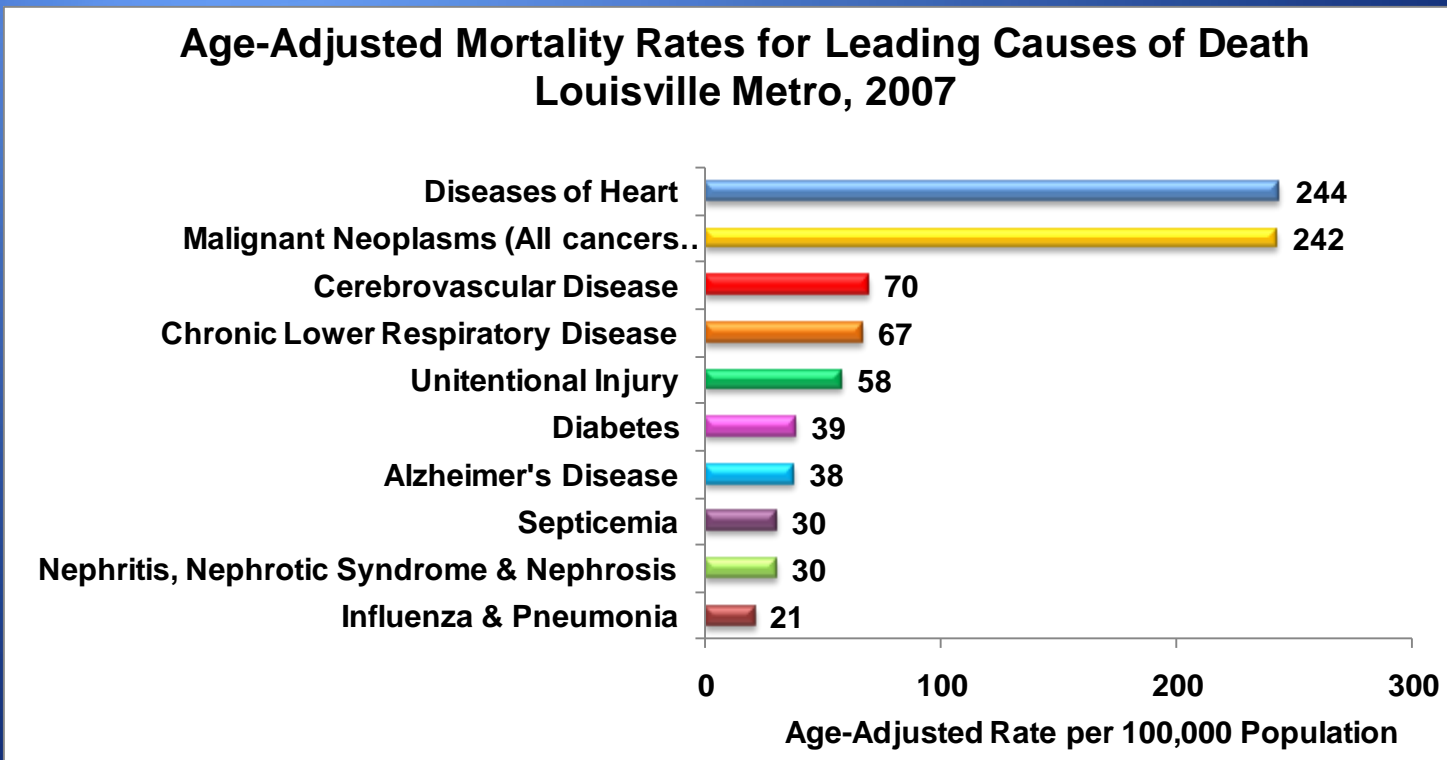
- The death rate from all causes (1103 per 100,000) was higher than state and national rates. It was 14% higher than the previous year.
- African Americans' death rate from all causes was 16% higher than the rate for Whites.



Source: 2007 Louisville Metro Preliminary Death Records

Top Ten Causes of Death

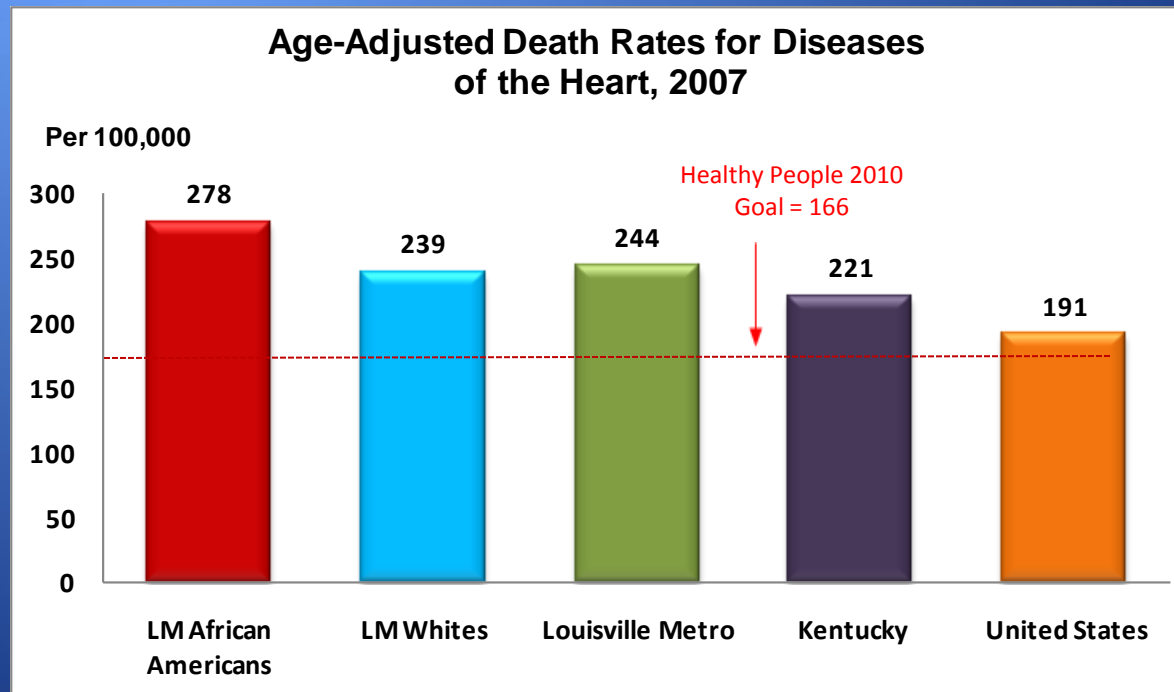
- Men had higher death rates for heart disease, cancers, chronic lower respiratory disease, unintentional injuries and stroke than women.
- African Americans had a higher death rate from diseases of the heart, cancers, stroke, and diabetes. Whites had a higher death rate from chronic lower respiratory disease, unintentional injuries.



Source: 2007 Louisville Metro Preliminary Death Records

Chronic Disease, 2007: Disease of the Heart

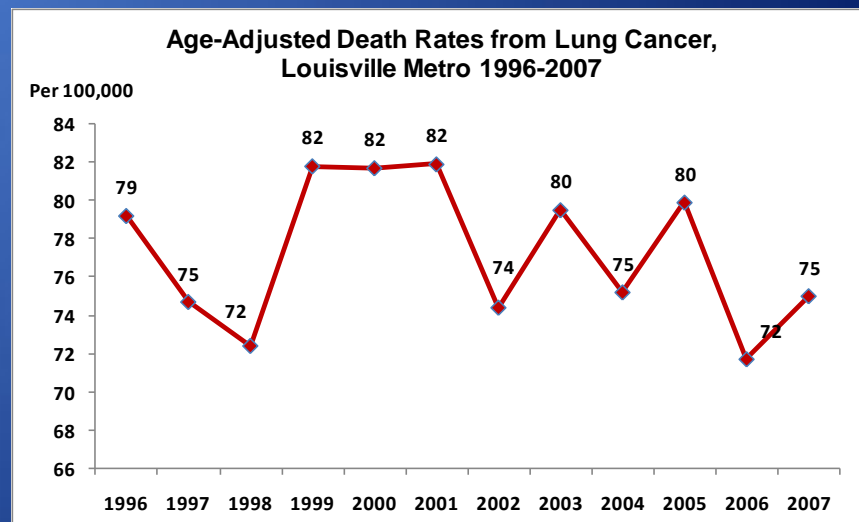
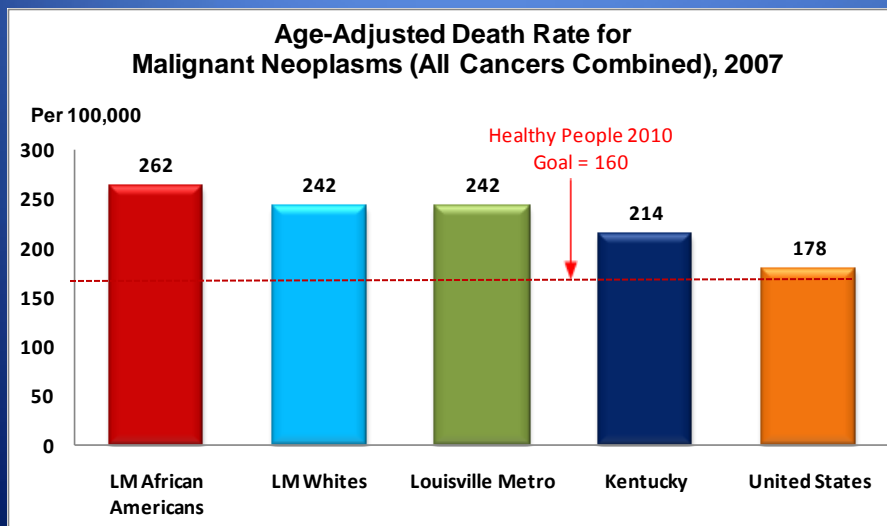
- Death rate for diseases of the heart was 244 per 100,000 population.
- The death rate for African Americans was higher than the rate for Whites.



Source: 2007 Louisville Metro Preliminary Death Records

Chronic Disease, 2007: Cancers

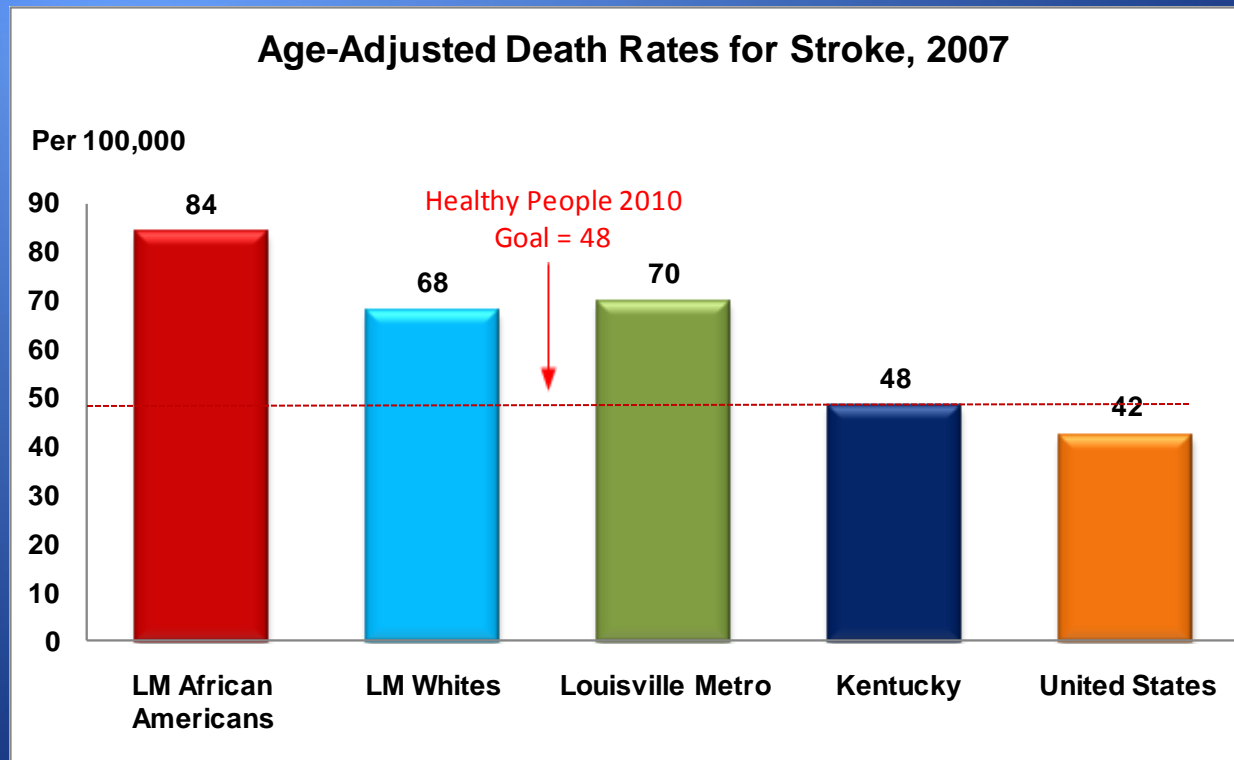
- Death rate for all cancers combined (Malignant neoplasms) was 242 per 100,000 population.
- Lung cancer death rate was 75 deaths per 100,000
- Lung cancer death rate for African Americans (76.5 per 100,000) was almost equal to the rate for Whites (76 per 100,000).



Source: 2007 Louisville Metro Preliminary Death Records

Chronic Disease, 2007: Stroke

- Death rate for strokes was 70 per 100,000 population.
- Death rate for African Americans was higher than the death rate for Whites (84 compared to 68 per 100,000).

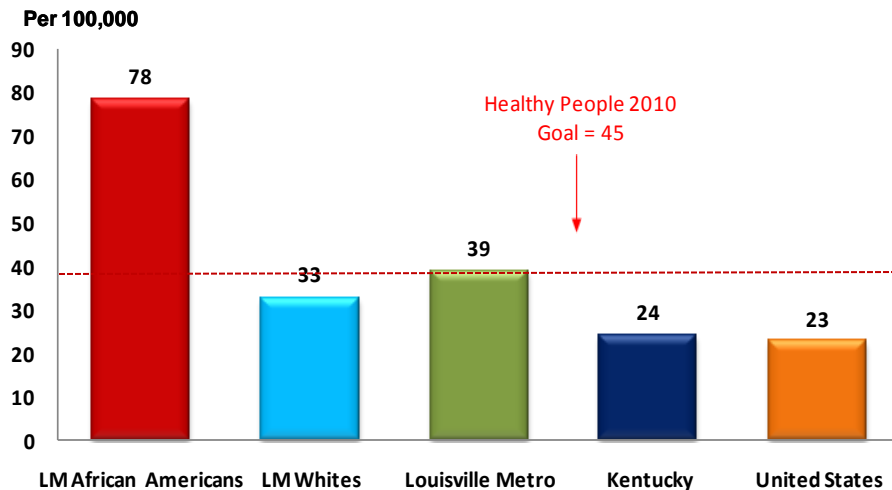


Source: 2007 Louisville Metro Preliminary Death Records

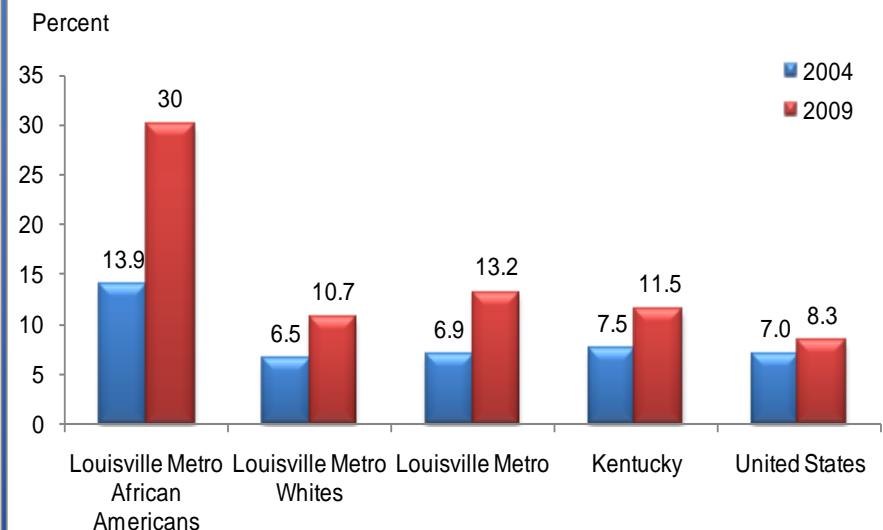
Chronic Disease, 2007: Diabetes

- Diabetes death rate was 39 deaths per 100,000.
- For African Americans, death rate from diabetes was more than twice the rate for Whites (78 compared to 33 per 100,000).
- BRFSS: An increase in the percentage of respondents having diabetes is observed overtime.

Age-Adjusted Death Rates for Diabetes, 2007



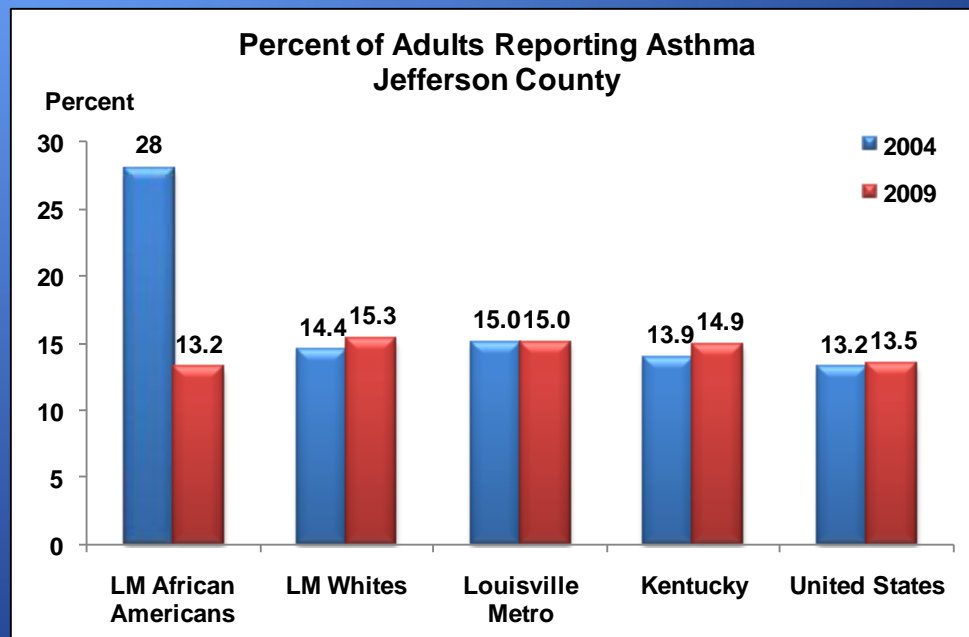
Percent of Adults Reporting Diabetes



Source: 2007 Louisville Metro Preliminary Death Records
Behavioral Risk Factor Surveillance Survey (BRFSS) 2004, 2009
Kentucky Cabinet for Health and Family Services (CHFS)

Chronic Disease, 2007: Asthma

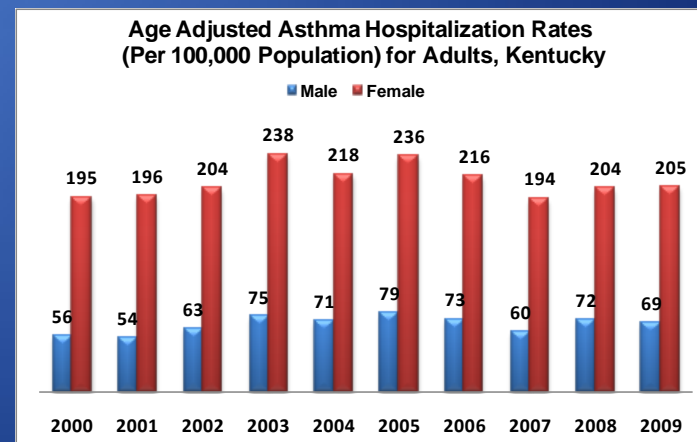
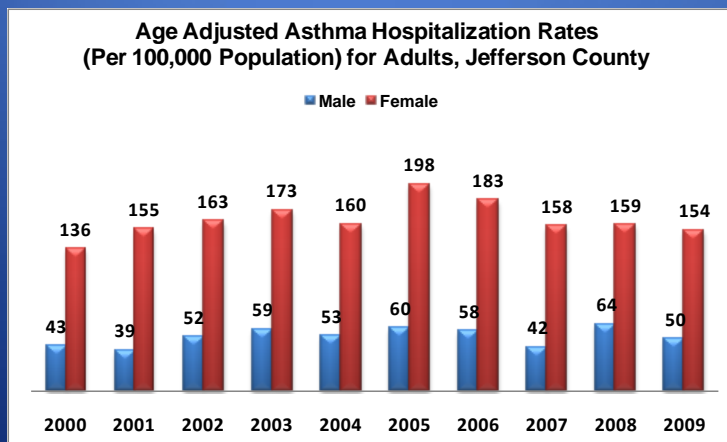
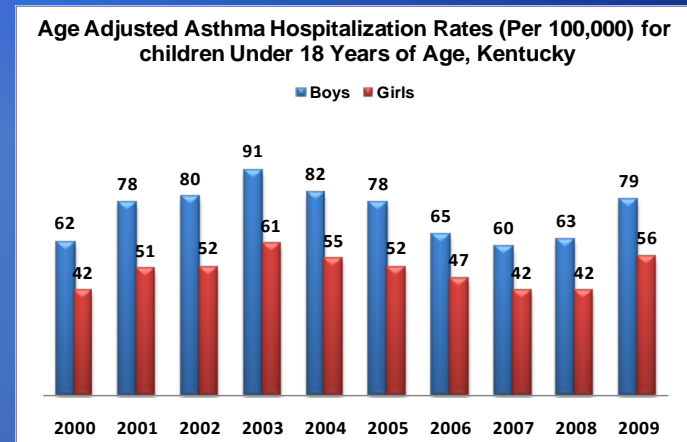
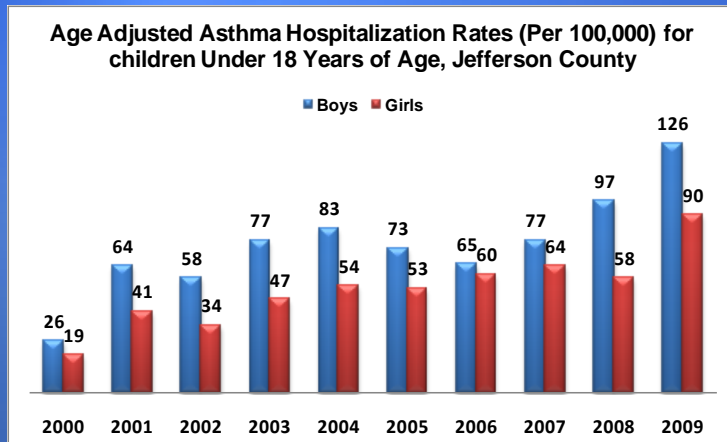
- The percentage of respondents that reported having asthma remained the same over time.
- Children from low-income families are more likely to develop asthma and it affects higher percentages of African American children than Whites.



Source: Behavioral Risk Factor Surveillance Survey (BRFSS) 2004, 2009
Kentucky Cabinet for Health and Family Services (CHFS)

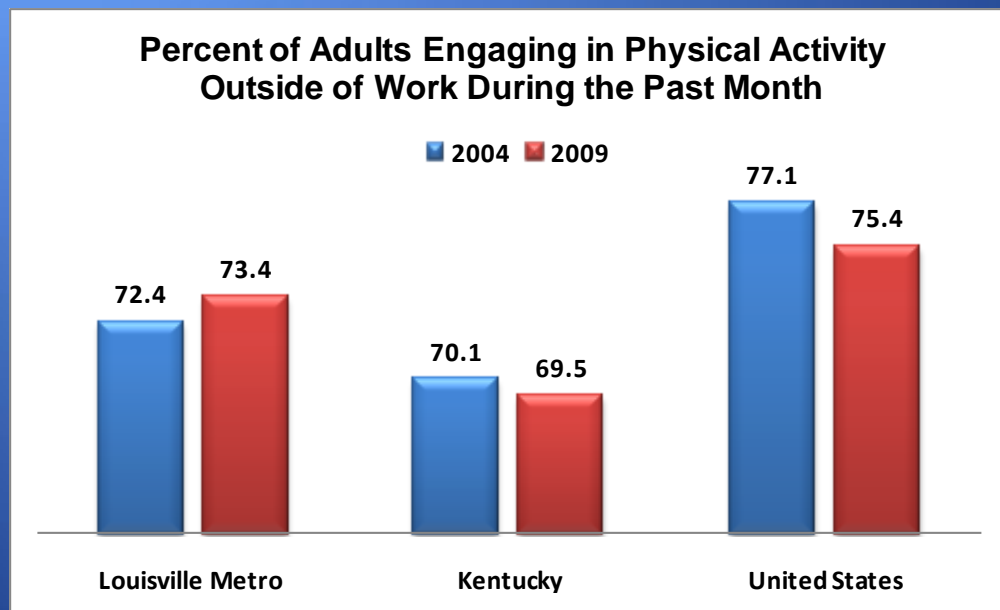
Asthma Prevalence

- Hospitalization rates for under 18 years males is higher and Jefferson County has higher rates for both genders than the state. For over 18 years adults, female hospitalization rates are higher than males and Kentucky has higher rates than Jefferson County.



Behavioral Risk Factors, 2009: Physical Activity

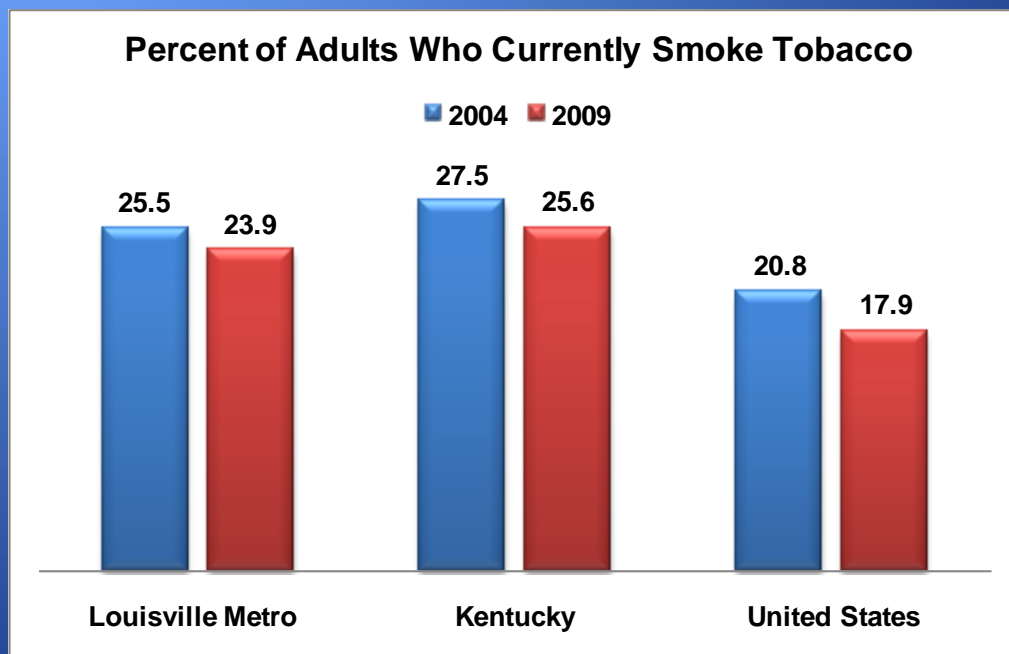
- Over 73% of BRFSS respondents reported participating in some physical activity outside of work in 2009.
- Low-income communities and communities of color face more environmental barriers to optimal eating and physical activity.



Source: Behavioral Risk Factor Surveillance Survey (BRFSS) 2004, 2009
Kentucky Cabinet for Health and Family Services (CHFS)

Behavioral Risk Factors, 2009: Smoking

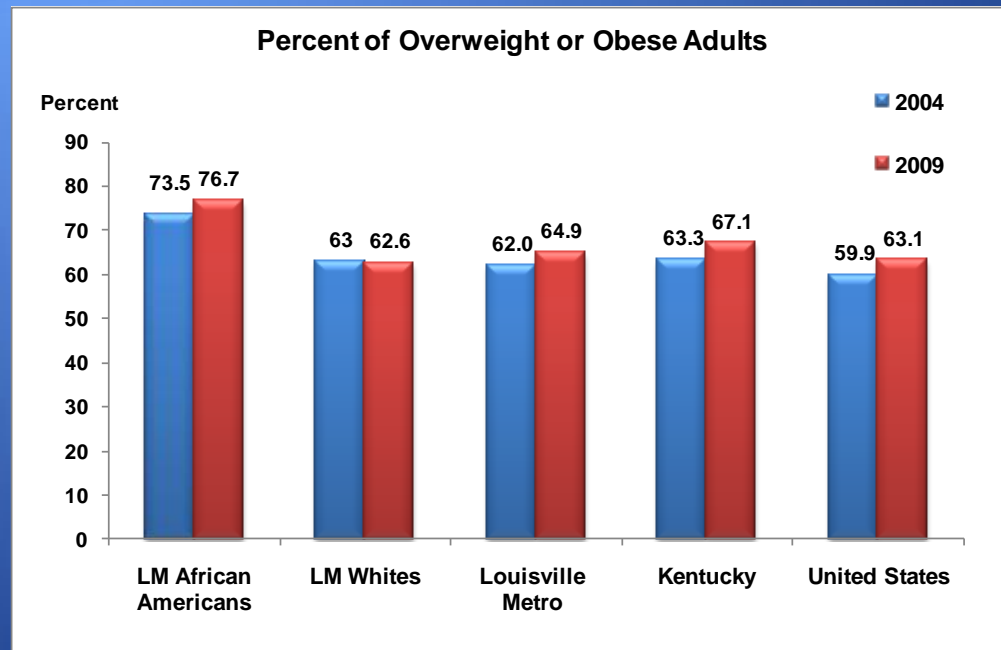
- In 2009, the number of BRFSS respondents that reported they smoked tobacco decreased from 25.5% to 24% between 2004-2009.
- African American male respondents reported the highest percent smoking (43.1%).



Source: Behavioral Risk Factor Surveillance Survey (BRFSS) 2004, 2009
Kentucky Cabinet for Health and Family Services (CHFS)

Behavioral Risk Factors, 2009: Obesity

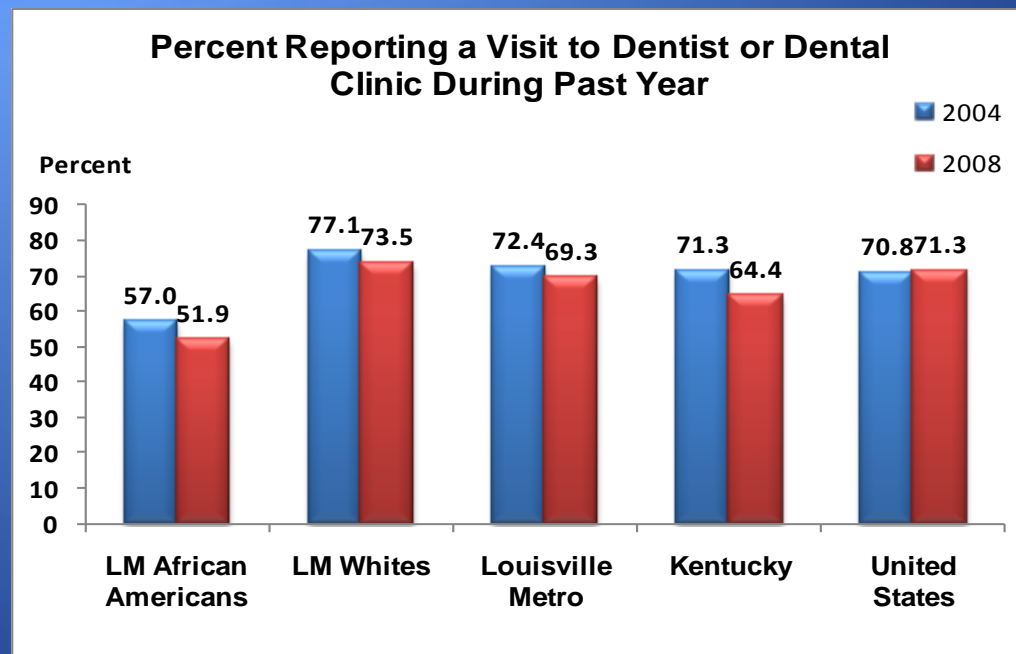
- The percentage of BRFSS respondents either obese or overweight based on reported height and weight continues to increase.
- African Americans were reported to be more likely overweight or obese when compared to LM White respondents.



Source: Behavioral Risk Factor Surveillance Survey (BRFSS) 2004, 2009
Kentucky Cabinet for Health and Family Services (CHFS)

Behavioral Risk Factors, 2009: Oral Health

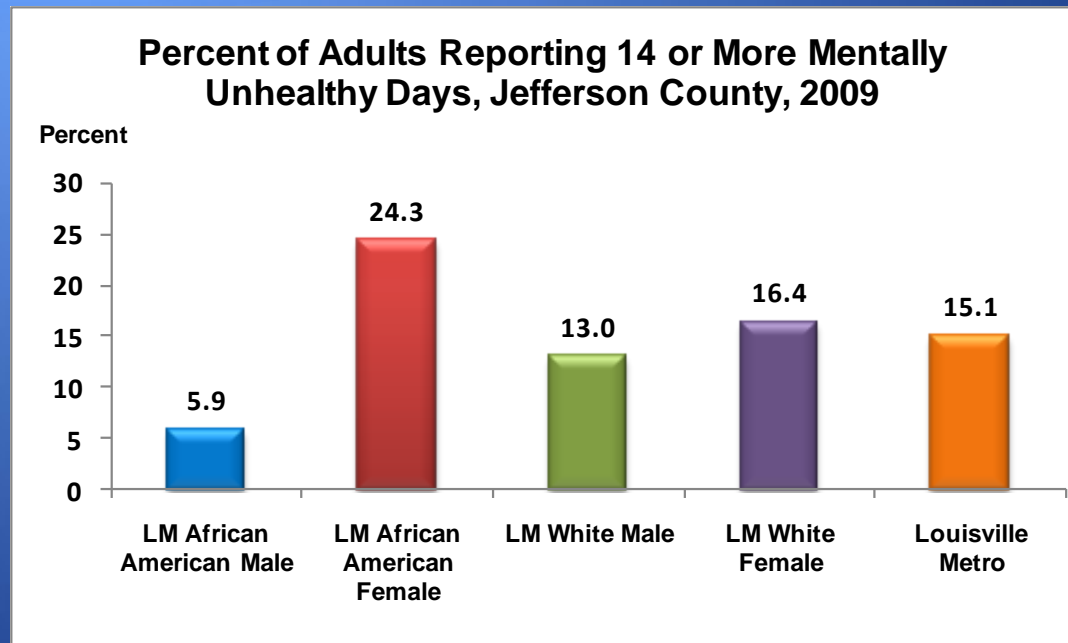
- Overall decrease overtime among all the categories.
- 52% of African American BRFSS respondents reported having teeth cleaned during the past year, compared to 73.5% for Whites.



Source: Behavioral Risk Factor Surveillance Survey (BRFSS) 2004, 2009
Kentucky Cabinet for Health and Family Services (CHFS)

Behavioral Risk Factors, 2009: Mental Health

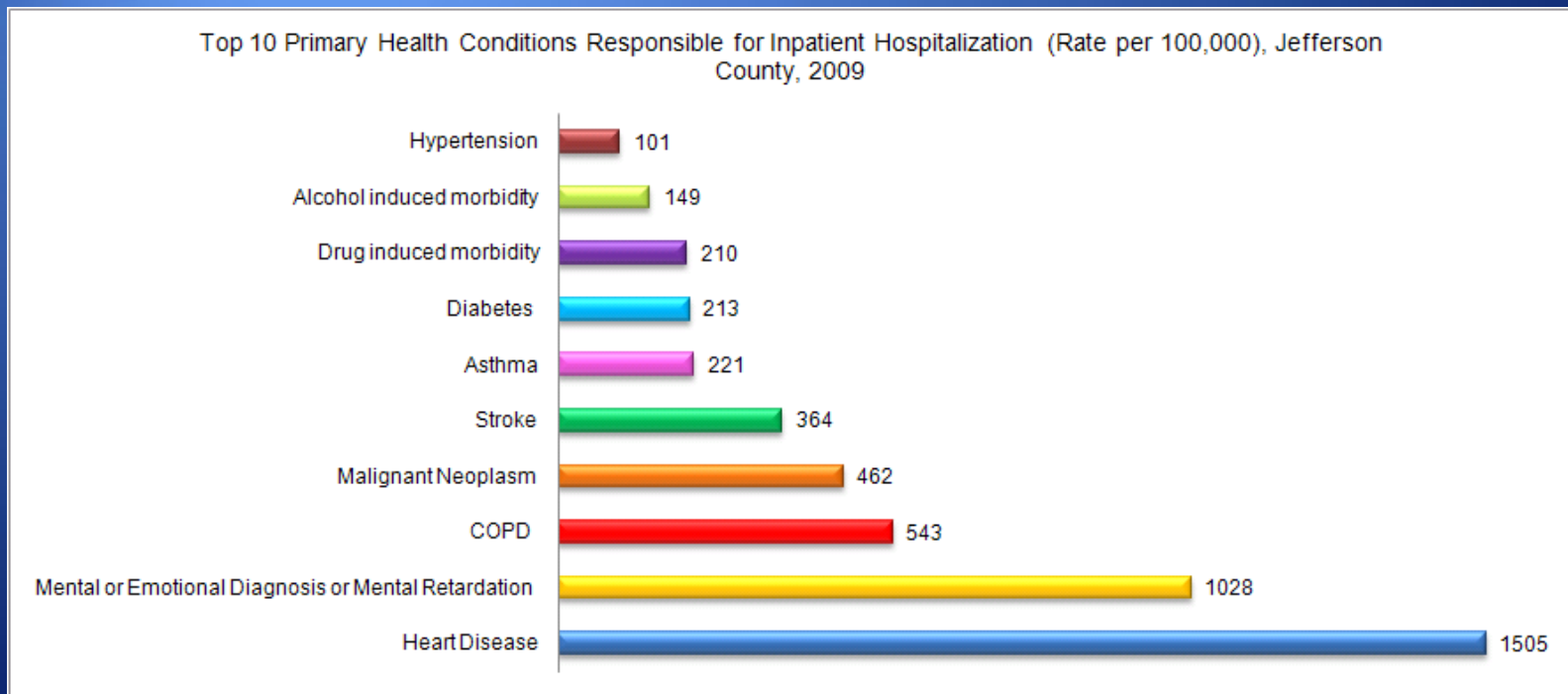
- Over 13% of Louisville Metro BRFSS respondents reported having 14 or more “mentally unhealthy” days with African American females respondents having the highest percentage (24.3%).



Source: Source: Behavioral Risk Factor Surveillance Survey (BRFSS) 2009
Kentucky Cabinet for Health and Family Services (CHFS)

Mental Health Cont..

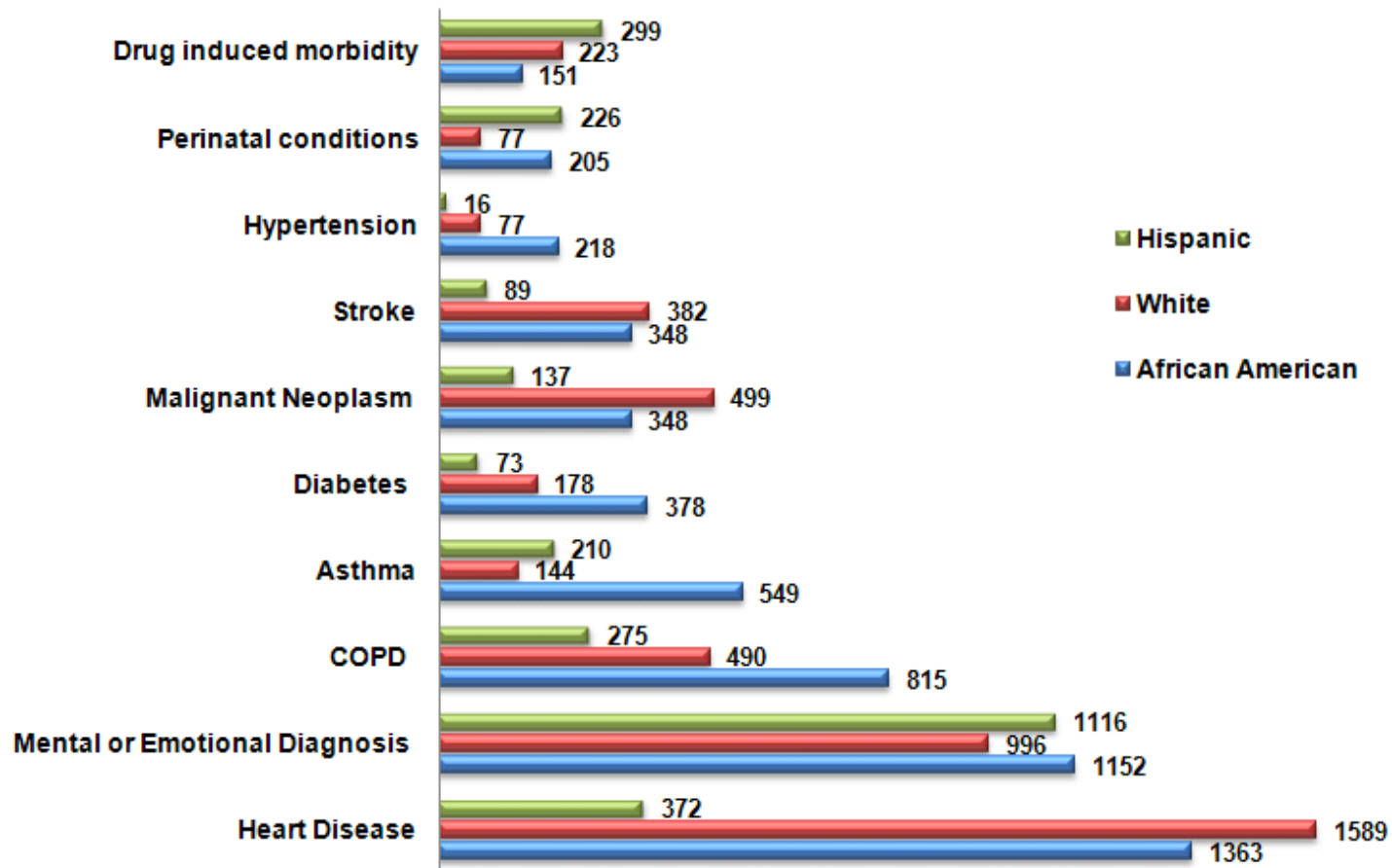
- Due to social circumstances, African American women are at higher risk of developing mental illnesses and are less likely to receive diagnoses and treatment than White Americans.
- The percentage of African Americans receiving help for mental illness is only half that of Non-Hispanic Whites.



Source: 2009 Hospitalization records, Kentucky Cabinet for Health and Family Services

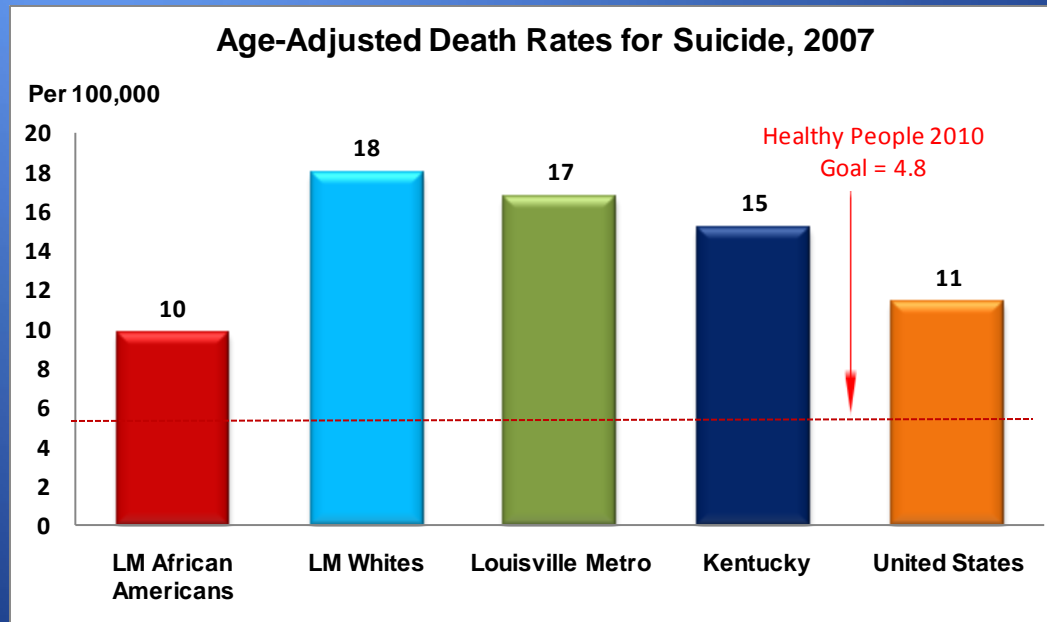
Mental Health Cont..

Top 10 Primary Health Conditions Responsible for Inpatient Hospitalization by Race and Ethnicity (Rate per 100,000), Jefferson County, 2009



Cause of Death, 2007: Suicide

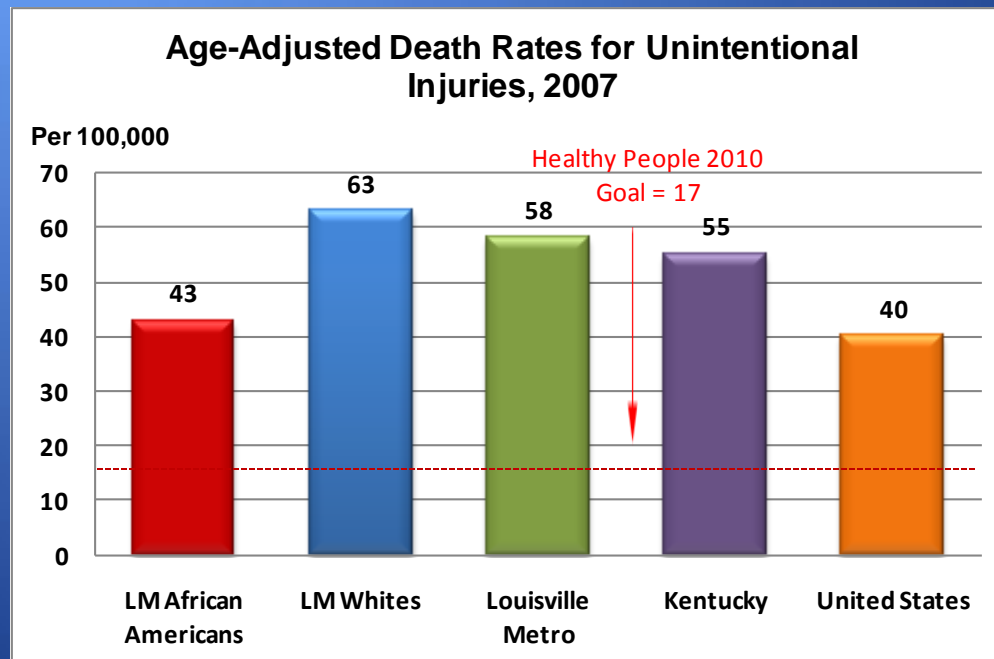
- The suicide rate among Whites was higher than the rate for African Americans, the state of Kentucky and national rates.
- Native American/Alaskan Native and Hispanic youth have the highest rates of suicide-related fatalities.



Source: 2007 Louisville Metro Death Records

Injuries, 2007: Unintentional

- The death rate from unintentional injury was 58 per 100,000 population, most of which resulted from motor vehicle crashes.
- Whites had approximately 40% higher death rates when compared to African American population and national rates. In 2006, African Americans were twice as likely to experience unintentional injuries compared to Whites.

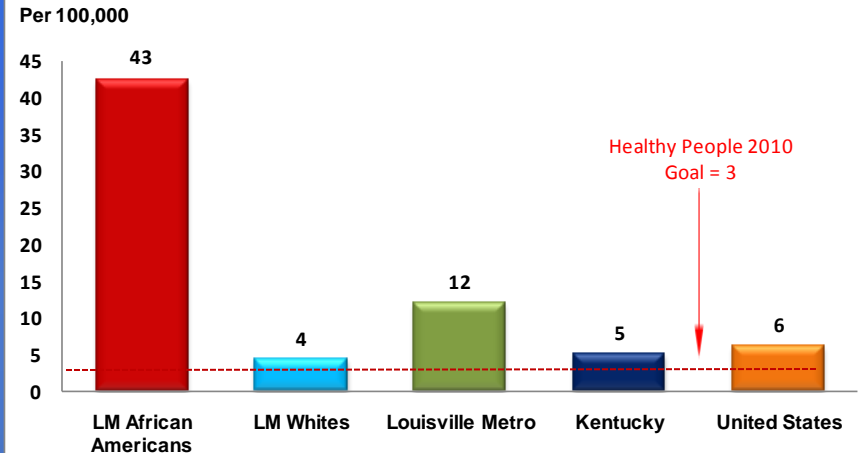


Source: 2007 Louisville Metro Death Records

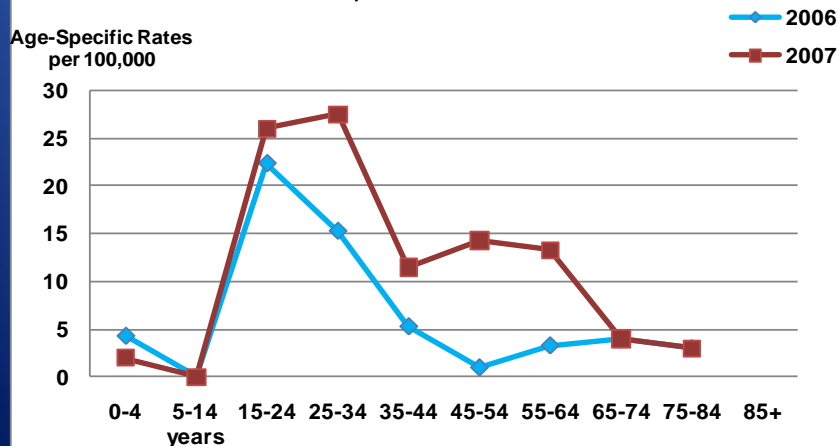
Injuries, 2007 Intentional-Homicide

- The homicide death rate was 12 deaths per 100,000. This was double when compared to the state and national rates.
- In the year 2007, the homicide death rate for African Americans was more than 10 times that of Whites.

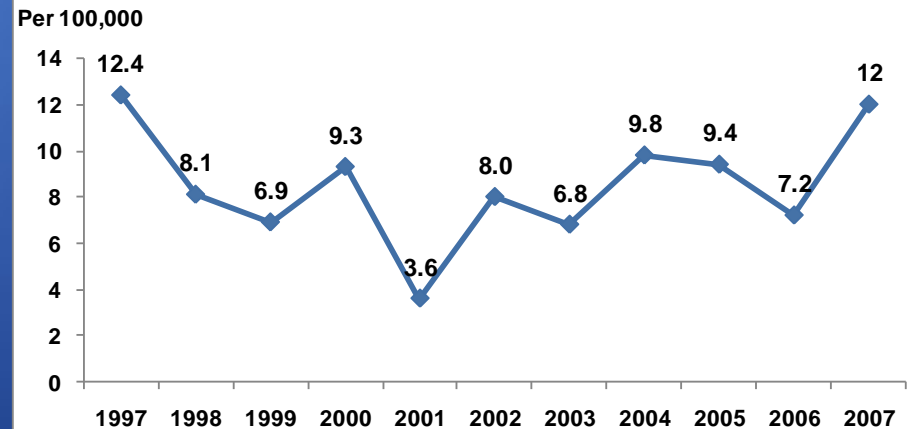
Age-Adjusted Death Rates for Homicide, 2007



Trends of Age-Specific Mortality Rates from Homicide, Louisville Metro Area



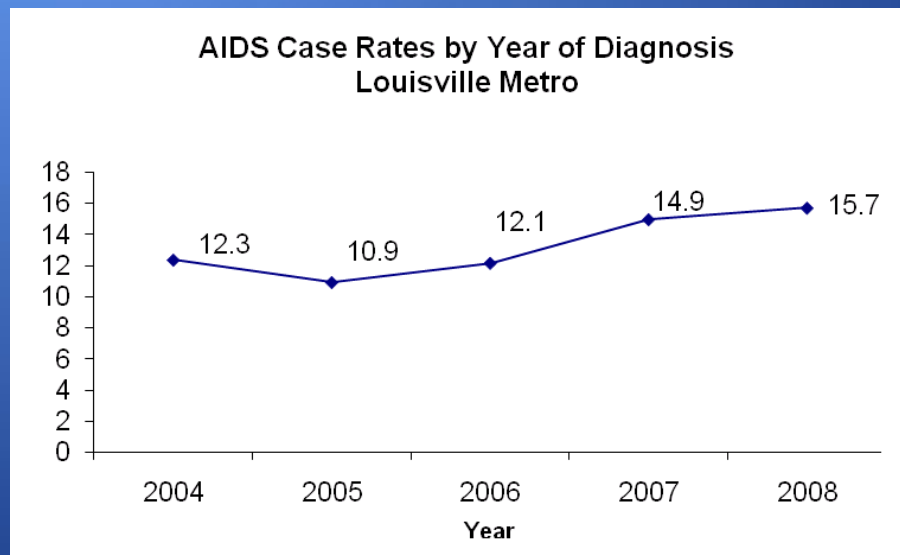
Age-Adjusted Mortality Data for Homicide, Louisville Metro 1997-2007



Source: 2007 Louisville Metro Death Records

Communicable Disease, 2009: AIDS

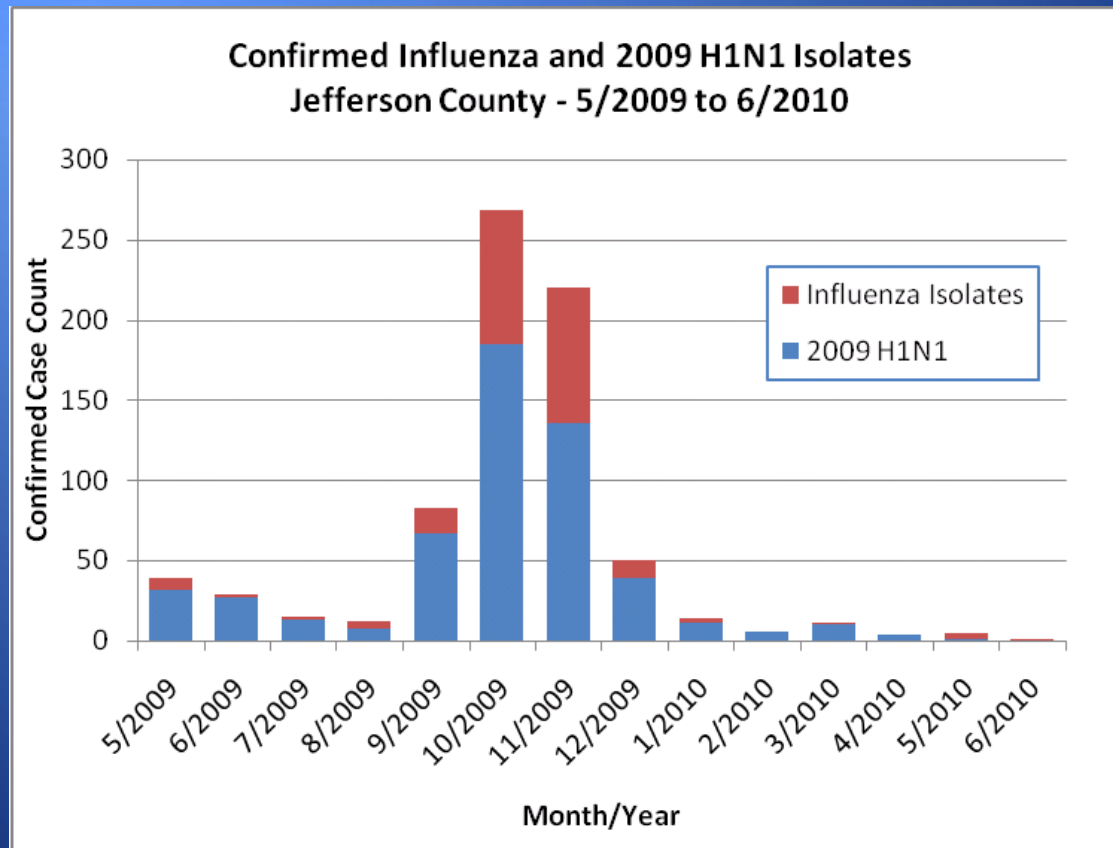
- Newly diagnosed AIDS cases had a rate of 16 per 100,000 population in 2008.
- The rate was highest for African Americans males.
- African Americans also have higher reported rates of Syphilis, Chlamydia, Gonorrhea, and Tuberculosis cases.



Communicable Disease, 2009: H1N1

➤ Culture confirmed reports received for 13 consecutive months (may 2009-June 2010).

Culture confirmed cases: 2009: H1N1 (Novel A Influenza) – 506, Influenza: 332
2010: H1N1 (Novel A Influenza) – 34, Influenza: 22



H1N1 Vaccination Campaign, 2009

Total population receiving vaccination: 79,748 (Louisville metro: 75,199 (94.3%))

Administration Sites : Community clinic- 19,396 School- 49,216
Open clinic- 5,728 Miscellaneous- 859

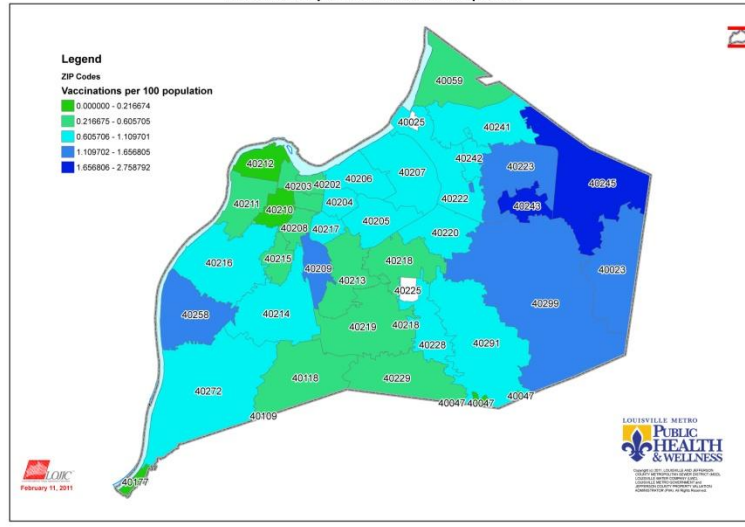
Race/Ethnicity: White: 71.2% African America/Black: 17.1%
Asian: 3.2% Native American: 0.2%
Pacific islanders: 0.1% Hispanic 3,339 (4.2%)

Gender: Female: 42, 830 (53.7%)
Male: 35,393 (44.4%) Male

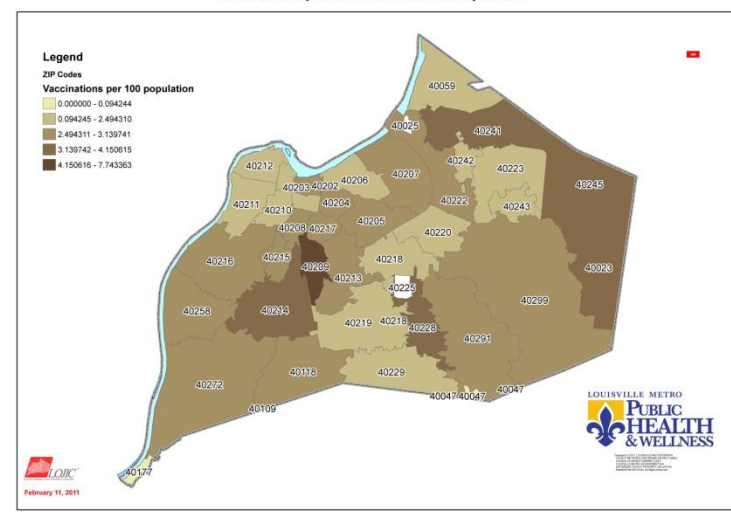
High risk categories:
Pregnant: 705
Immune compromised: 1,746
Other health conditions: 13,681

H1N1 Vaccination Campaign, 2009

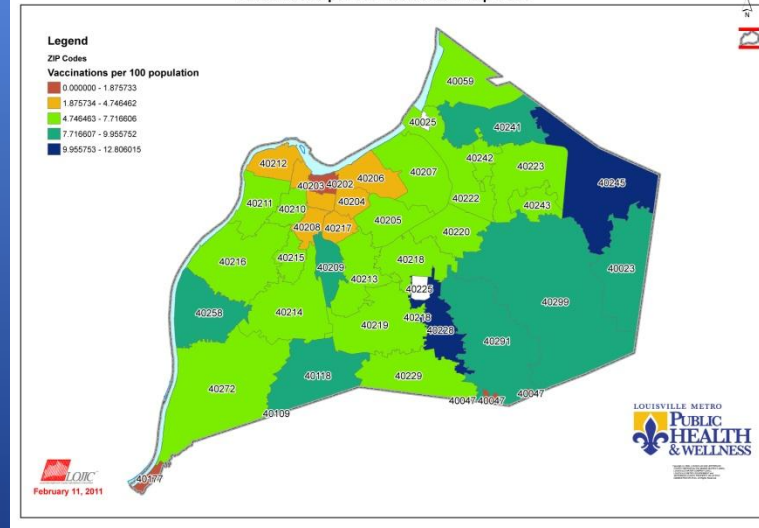
H1N1 Vaccinations in 2009 Open Clinics
Vaccinations per 100 Residents in Zip Code



H1N1 Vaccinations in 2009 Community Clinics
Vaccinations per 100 Residents in a Zip Code

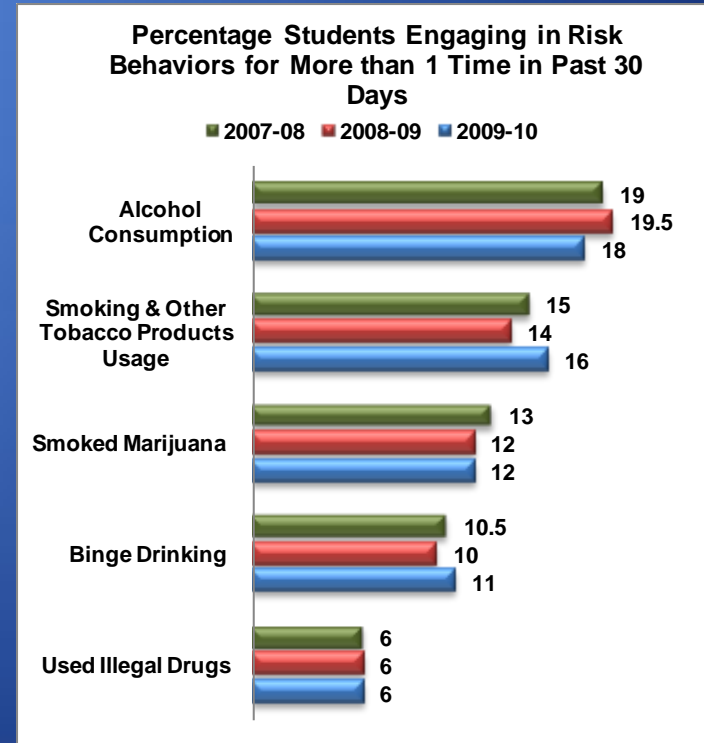
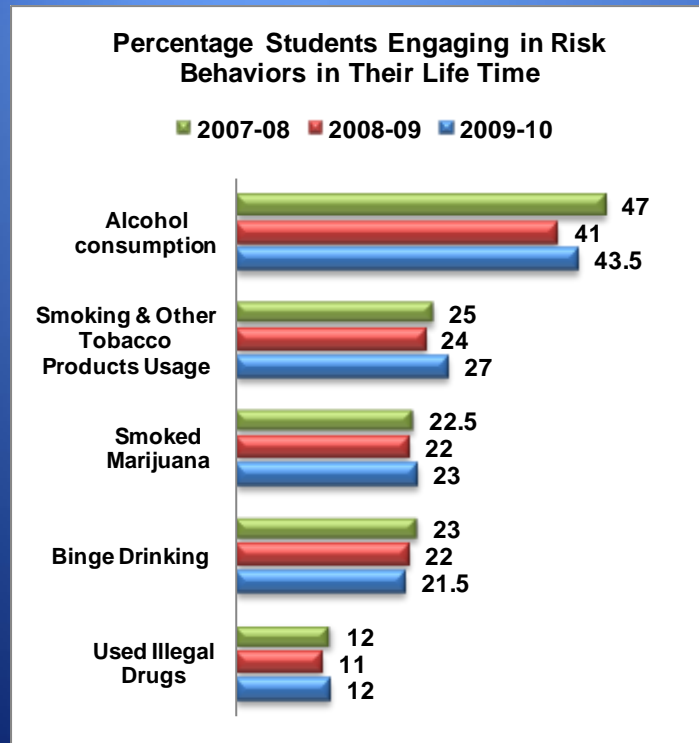


H1N1 Vaccinations in 2009 School Clinics
Vaccinations per 100 Residents in Zip Code



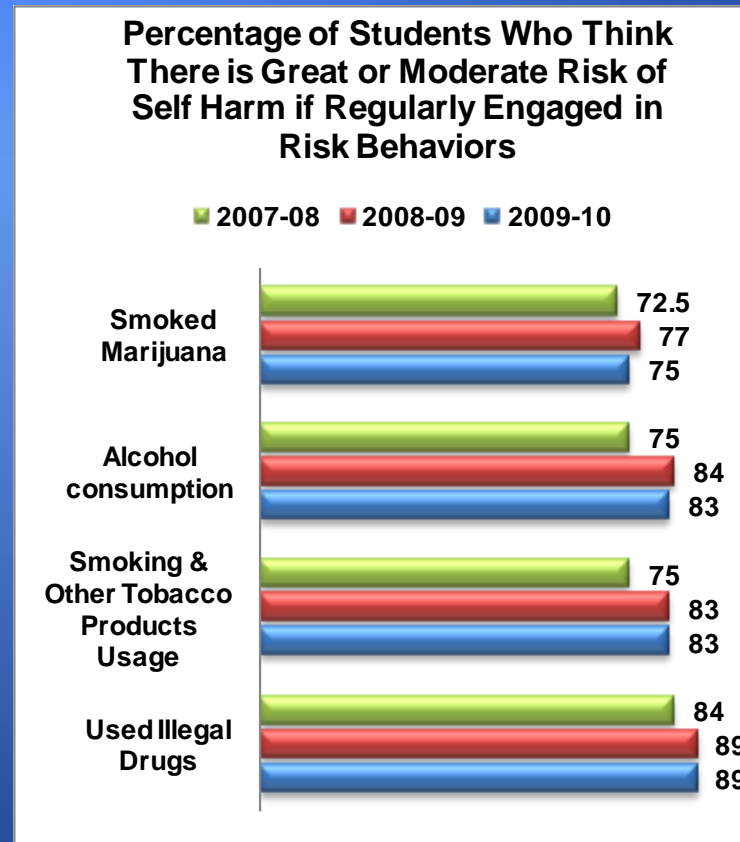
Youth Risk Behaviors, 2010

- Over 100,000 respondents for 2007, 08 and 2009 (three years combined)
- Alcohol abuse: 4 in every 10 respondents in their life time & 2 in 10 in the past 30 days consumed alcohol
- Smoking and tobacco products usage increasing overtime



Youth Risk Behaviors, 2010

- Increase in awareness over time, but the percentage of respondents who think there is slight or no risk in engaging in high risk behaviors is still high

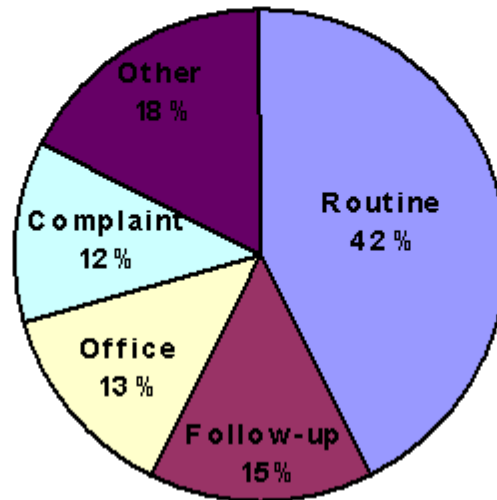


Source: Safe and Drug Free school survey, Jefferson County Public School District

Environmental Health, 2009

- Division of Environmental Health and Protection: includes services such as Food Hygiene, Public Facilities, Hazardous Materials, Childhood Lead Poison and Prevention, Mosquito Control.
- Environmental Division provided approximately 24,000 services to Louisville Metro population in 2009.

**Percent of Environmental Inspections
by Inspection Type, 2009**



Source: Division of Environmental Health and Protection, LMPHW

Environmental Health, 2009

Food Hygiene:

- Conducted 7,012 routine inspections, 1,407 complaint investigations and 190 food borne illness investigations during year 2009
- Over all, the number of critical violations decreased over time.

Public facilities:

- (1) Recreational Water Illnesses (RWI's): caused mainly by organisms such as Cryptosporidium, Giardia, Escherichia. coli, Norovirus, Adenovirus and Hepatitis A.

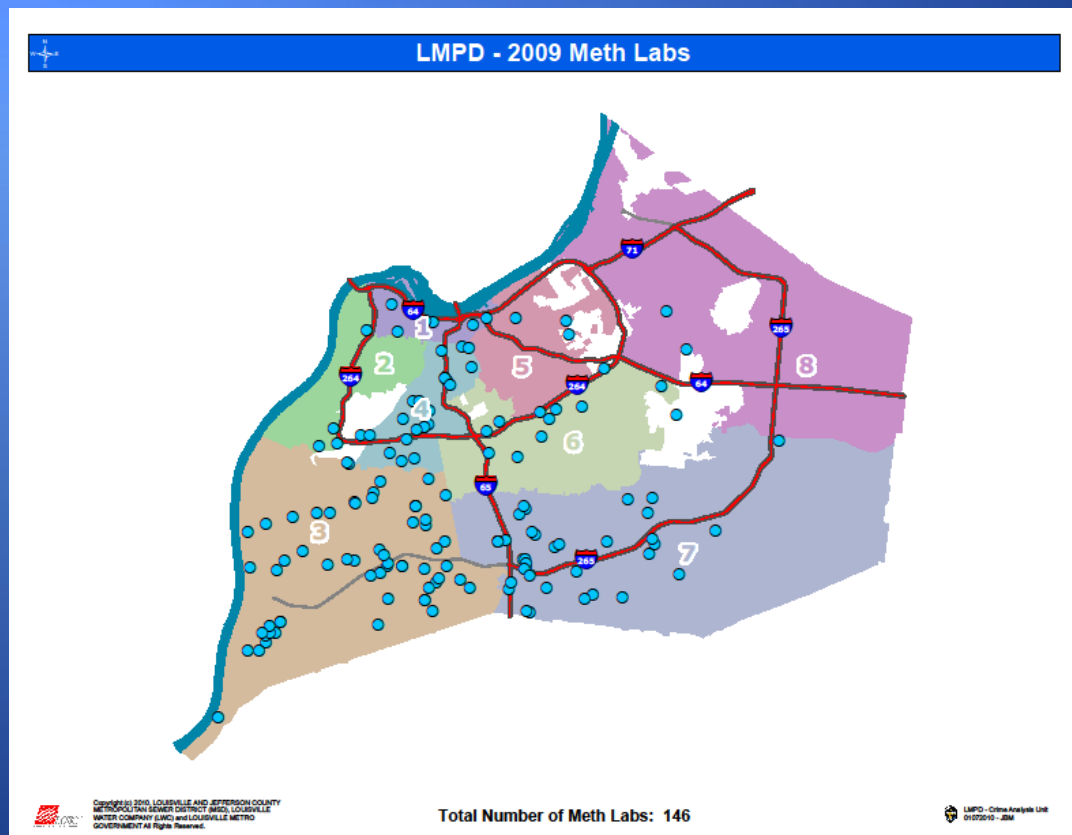
This division conducted 1,228 routine inspections, responded to 158 citizen complaints, collected and analyzed 7,085 water samples in 2009. The total number of top 5 aquatic facility critical violations recorded were 1659.

- (2) Rabies: Locally over 1000 animal bites are recorded each year and total number of animal bites remained almost same as of year 2008.

Environmental Health, 2009

Meth labs:

- 146 properties where evidence of Methamphetamine production was discovered in 2009. This is 50% increase when compared to 2008.



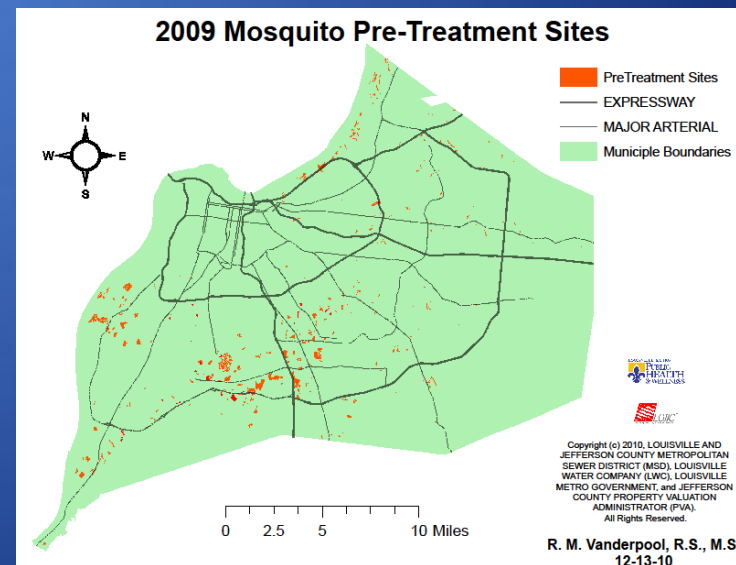
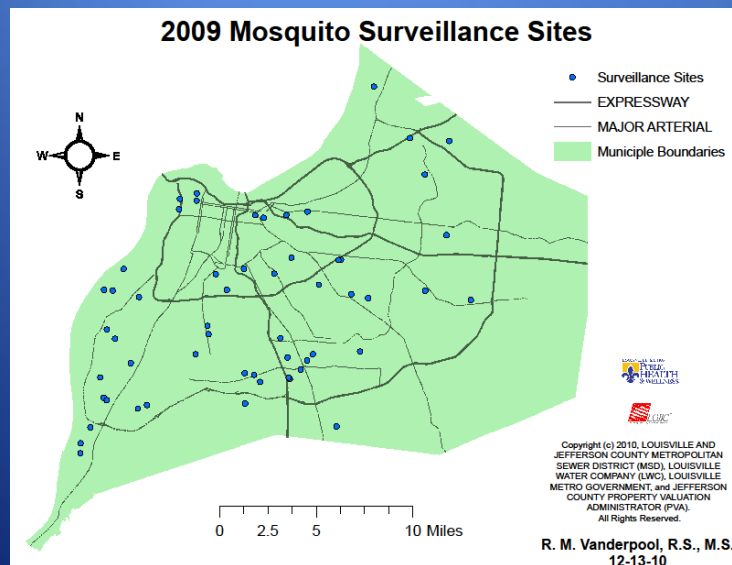
Source: Division of Environmental Health and Protection, LMPHW

Environmental Health, 2009

Mosquito Control: Major functions: Surveillance, source reduction, education, complaint investigation and biological control .

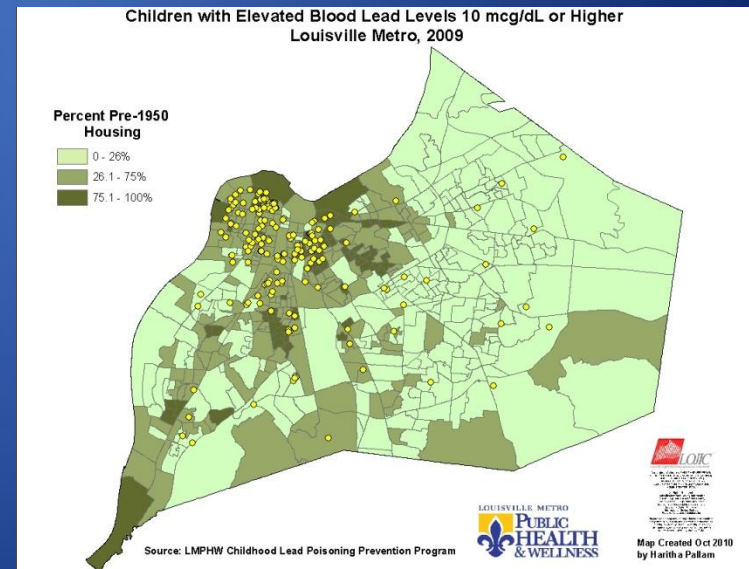
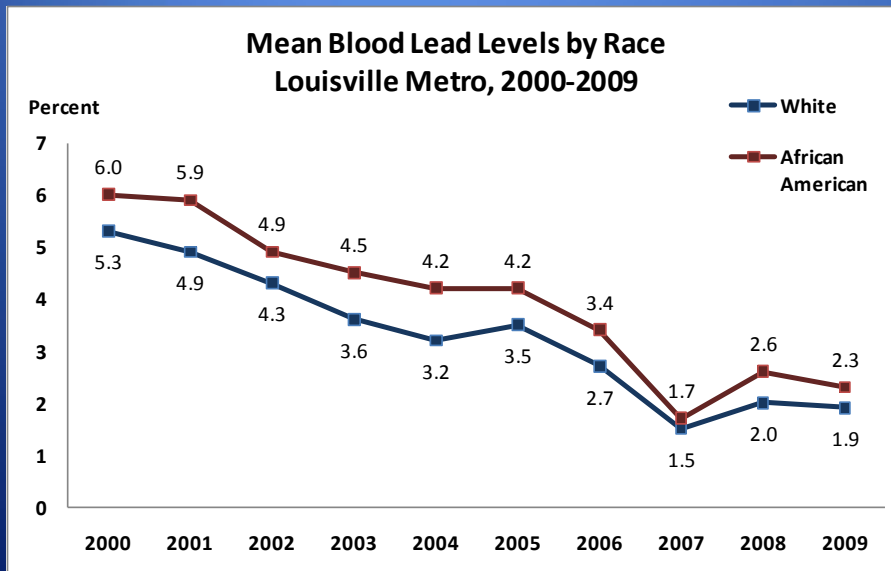
- 1195 mosquito related service requests/complaints were received in 2009
- within the MSD combined sewer system 14,500 catch basins were identified that provide breeding habitat for disease vector mosquitoes.

Arbovirus Surveillance: 133 samples collected throughout Jefferson County and no confirmed cases were found.



Childhood Lead Poisoning, 2009

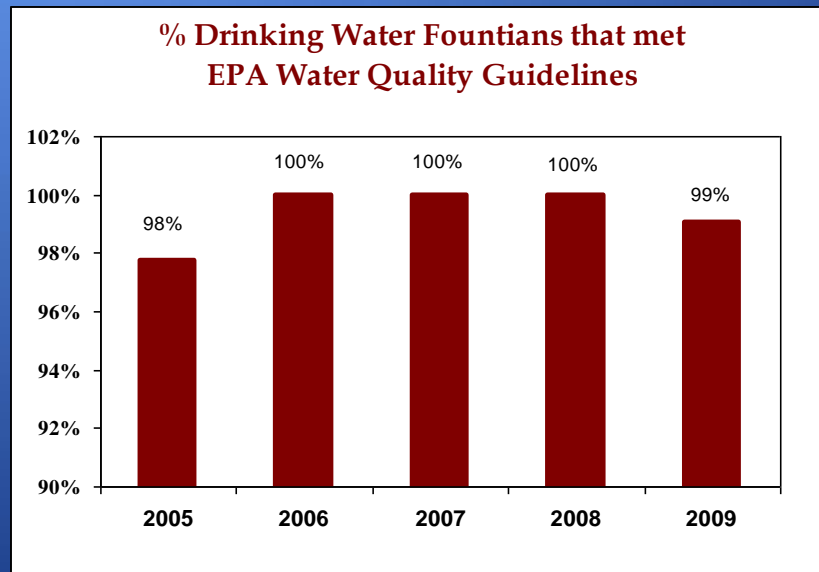
- In 2009, 10,868 Louisville Metro children were screened.
- Children living in poverty are at higher risk for elevated Blood Lead Levels (BLLs).
- Blood lead levels have steadily declined among all children over the past years. However, the levels for African American children remain consistently higher.



Source: Division of Environmental Health and Protection, LMPHW

Louisville Water Company lead Monitoring Program, 2009

- Monitoring lead levels in drinking water supplied to schools and public fountains, etc.
- In Jefferson County there are 290,000 water services in the distribution system among which about 19,700 are lead lines.
- By the year 2020, Louisville water company aim to conduct line replacement and rehabilitation program for changing the lead lines



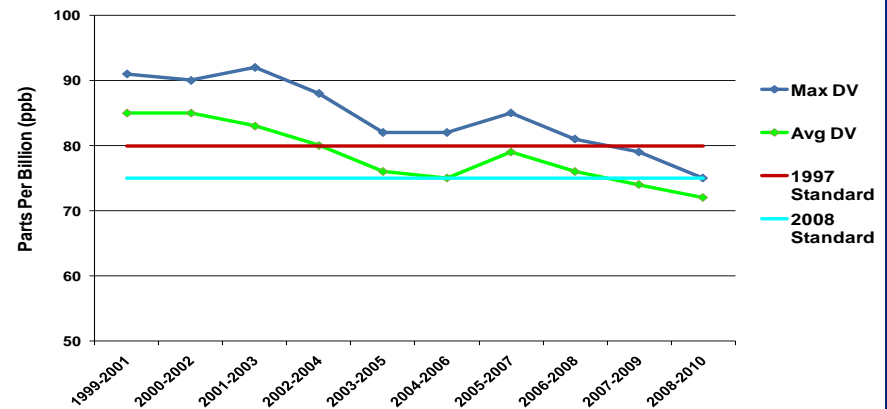
Source: Lead Monitoring program, Louisville Metro Water Company

Air Pollution Control, 2009

➤ APCD monitors ambient air pollution, measures meteorological, quality assurance data, and helps forecast air quality for Louisville.

➤ Criteria pollutants under the National Ambient Air Quality Standards (NAAQS): Ozone and particulate matter

**Louisville Metro 8-Hour Ozone Design Values
1999-2010**



NAAQS Attainment Standards

March 2010 Status

Pollutant	Standard	Average Time	Attainment
Carbon Monoxide	9 ppm	8-hour	Attainment
Lead	1.5 µg/m3	Quarterly Average	Attainment
Nitrogen Dioxide	0.053 ppm	Annual Average	Attainment
Particulate Matter (PM10)	150 µg/m3	24-hour	Attainment
Particulate Matter (PM2.5)	15 µg/m3	Annual Average	Nonattainment
Ozone	0.08 ppm	8-hour	Attainment
Sulfur Dioxide	0.03 ppm	Annual Average	Attainment

PM_{2.5} Monthly Averages Tracking Table for 1999-2010

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Months >15.0 µg/m3
1999	14.7	13.8	12.4	12.7	18.1	23.4	26.6	19.5	15.6	17.4	16.1	12.6	7
2000	15.8	16.4	13.4	13.6	17.1	17.7	23.5	21.2	13.3	19.7	15.6	17.1	9
2001	21.9	13.9	15.2	13.3	17.7	20.5	24.6	27.4	16.1	13.8	15.8	17.1	8
2002	13.1	10	12.3	11.4	15.9	22.3	30.4	23.8	21.7	13.2	11.8	15.6	6
2003	12.2	16.3	15	14.6	13.1	18.6	21.7	23	17.3	12.5	12	10.6	5
2004	10.5	15.7	10.1	11.3	13.4	15.9	17.1	18.4	17.6	13.8	11.1	11.1	5
2005	11.7	17.1	14.3	13.1	14.9	19.6	20.2	19.8	24.1	16.1	12.6	15.5	7
2006	10.3	13	12.5	12.6	11.9	18.1	23.9	22.5	13.6	10.1	13.6	11.1	3
2007	9.3	12.2	14.9	11.2	18.4	19.9	18.3	22.8	16.9	11.1	12.5	14.1	5
2008	11.8	12	11.9	11.6	12.1	11.8	18.1	17.1	17.6	10.6	14.3	9.4	3
2009	14.6	11.1	11.3	9.3	10.3	13.9	13.1	12.6	12.1	8.9	13.8	12.9	0
2010	13.3	16.3	12.2	12.2	11	14.1	16	16.6	11	17.1	12.6		4
Monthly Avg	13.3	14	13	12.2	14.5	18	21.1	16.4	16.4	13.7	13.5	12.9	

Source: Louisville Metro Air Pollution Control District (APCD)

Data Details and Limitations for LMPHW

- ◆ BRFSS: 2008
- ◆ Collision Data: 2009
- ◆ Communicable Diseases: 2008
 - ◆ Most current information available for Reportable diseases
- ◆ Environmental: 2009
 - ◆ Air Pollution data: 2010
- ◆ Hospitalization Data: 2009
- ◆ Lead Data: 2009 (Current data available)
- ◆ Vital Statistics Data (Birth and Death):
 - ◆ Official File (closed file): 2006
 - ◆ Data used for 2010 HSAR: 2007 (Preliminary data)

Data Details and Limitations

Data Available by Geographical Units:

- BRFSS: ZIP code, Council district groups
- ◆ Census: Demographics by census tracts, block, etc
- ◆ Collision and Crime Data: Square miles
- ◆ Communicable Diseases: Some reportable diseases only
- ◆ Environmental: Census block level
- ◆ Hospital Data: Zip code
- ◆ Lead Data: Jefferson County Neighborhoods and Zip codes
- ◆ Vital Statistics Data (Birth and Death): Zip code, Census tracts

Acknowledgements

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Department of Vital Statistics

Department of Public Health

Department of Education

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Office of Policy Planning and Evaluation

Division of Environmental Health and Protection

Louisville Air Pollution Control District (APCD)

Louisville Water Company

Louisville Metro Police Department (LMPD)

Jefferson County Public School District (JCPS)